

541667

## (12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau



07 JUL 2005



(43) International Publication Date  
29 July 2004 (29.07.2004)

PCT

(10) International Publication Number  
**WO 2004/062968 A1**

(51) International Patent Classification<sup>7</sup>: **B60R 13/02, 21/04, B60J 5/04**

(81) Designated States (*national*): AB, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(21) International Application Number:  
**PCT/US2003/000419**

(84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

(22) International Filing Date: 7 January 2003 (07.01.2003)

(25) Filing Language: English

(26) Publication Language: English

(71) Applicant (*for all designated States except US*): **JOHNSON CONTROLS TECHNOLOGY COMPANY [US/US]; 49200 Halyard Drive, Plymouth, MI 48170 (US)**.

**Published:**

— with international search report

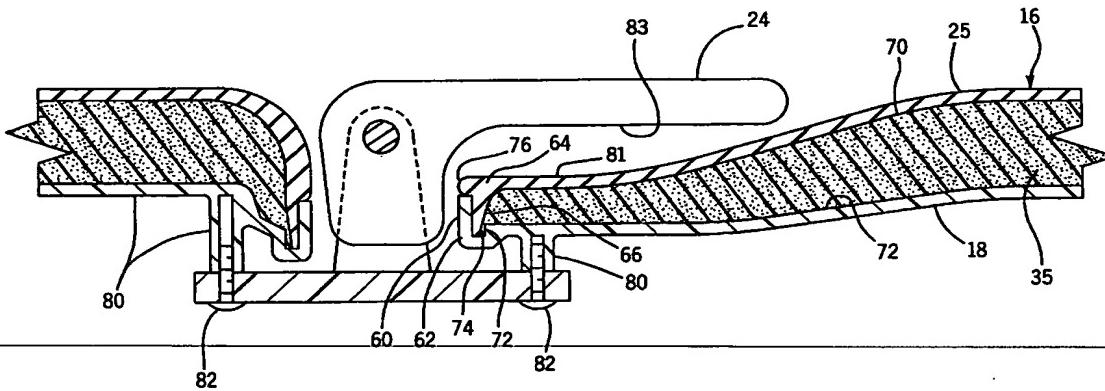
(72) Inventor; and

(75) Inventor/Applicant (*for US only*): **BOYER, Stan, P. [US/US]; 10432 Beechnut Lane, Zeeland, MI 49464 (US)**.

(74) Agent: **RATHE, Todd, A.; Foley & Lardner, 777 E. Wisconsin Avenue, 33rd Floor, Milwaukee, WI 53202-5306 (US).**

*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

(54) Title: VEHICLE DOOR PANEL AND COMPONENT ASSEMBLY MOUNTED THROUGH THE PANEL



**WO 2004/062968 A1**

(57) Abstract: Assembly (12) includes a substrate (18) having an aperture (60) extending through the substrate (18) and having a first capping portion (62, 162, 362, 462) at least partially about the aperture (60), a skin (25) having a second capping portion (64, 164, 364, 464), at least one layer (35) between the substrate (18) and the skin (25) and a component (24) extending through the aperture (60). The first capping portion (62, 162, 362, 462) and the second capping portion (64, 164, 364, 464) cooperatively engage one another to close off the at least one compressible layer (35) between the substrate (18) and the skin (25). A method for manufacturing the panel (16) is also disclosed.

**BEST AVAILABLE COPY**